

Destination L1: A Thematic Unit

Science as Fiction: Worlds Colliding

STUDENT TEXT

SCIENCE FICTION

The term “science fiction” sounds like worlds colliding. There is the study of science, which relies on careful observation, identification, and investigation, all of which give way to scientific theories. And then there is fiction, which relies upon the act of creating an imaginative pretense. So how can both become one? Science fiction is a type of literary composition, or genre, that has as many definitions as there are science fiction authors. A broad definition states that science fiction is an imaginative story that deals with speculative science content—it considers how new science might affect the future. Through story telling, science fiction experiments with how science might alter mankind and its relationship with the universe. However, science fiction doesn’t deal solely with the discipline of science. Philosophy, social science, and physics are some examples of content that work themselves into science fiction. Science fiction often centers on travel, either through space, or through time, often by use of a futuristic piece of machinery. The goal is generally to take the reader somewhere that they have never been, imagining something that is presently not reality, and expand the horizons into a world of the future—occasionally a world of the past.

FOUNDING FATHERS OF SCIENCE FICTION

Image courtesy of Andrew Nash.



Jules Verne

One of the founding fathers of science fiction, [Jules Verne](#), published novels and short stories that brought the fiction of science into the foreground in the 19th century. Born in France in 1828, Verne had an early childhood fascination with exploration. His parents insisted that he study law. However, after his law studies were concluded, he dove into his first love—the world of literature. Verne’s novels became enormously popular throughout the world, among which the best known are *Around the World in Eighty Days*, Philéas Fogg’s daring but realistic travel feat on a wager, based on a real journey by the U.S. traveler George Francis Train (1829-1904); *A Journey to the Center of the Earth*, a story of an expedition that enters the Earth’s hollow center; and, *Twenty Thousand Leagues Under the Sea*, introducing Captain Nemo and his elaborate submarine, the Nautilus.

Many of Verne’s books have been called prophetic. In his novel [Around the Moon](#), Verne described the effects of weightlessness. He even pictured the spacecraft’s fiery reentry and splashdown in the Pacific Ocean—at a site just three miles from where Apollo 11 landed on return from the moon in 1969.

Some of Verne’s forecasts may have been what are called self-fulfilling prophecies. These occur when an idea is planted in someone’s mind, and later becomes reality. We know that many of the scientists and engineers who pioneered spaceflight (such as [Hermann Oberth](#) and [Konstantin Tsiolkovsky](#)) read Verne’s works. Modern astronautics might have had a slow start had Verne not written about the subject. With his close attention to scientific principles, Verne wrestled with the same technical problems that astronautical engineers faced in the 20th century. Therefore, Verne’s carefully constructed answers to scientific questions were similar to modern solutions.

The other recognized 19th century founding father of science fiction is H. G. Wells. He was born in England in 1866, and his love for science won him a scholarship to study in London. He never called his work “science fiction,” but his extensive studies in biology and intrigue for the future clearly provided substance for his works. Wells is known for his novels in which he co-mingled science, adventure, and social commentary. Wells’ work is widely recognized as being ahead of its time. There are four novels for which he is best known. *The Time Machine* (1895), is a story about a machine that moved man through time into another era; *The Island of Dr. Moreau* (1896), deals with a mad scientist who transformed animals into human creatures; *The Invisible Man* (1897), is a story that rendered a man invisible and subsequently mad; and the [The War of the Worlds](#) (1898), a



drama that evolved around a Martian invasion on Earth - specifically, the English countryside. *The Time Machine*, *The Island of Dr. Moreau*, and *The Invisible Man* all have been made into films at least once. As he grew older, Wells became concerned with the fate of human society in a world where technology and scientific study were advancing at a rapid pace. His later works were non-fiction, and centered on social commentary. Wells is generally recognized as an author whose works were highly entertaining and who tried to pave the way for a wiser attitude about the future of the mankind.



H. G. Wells

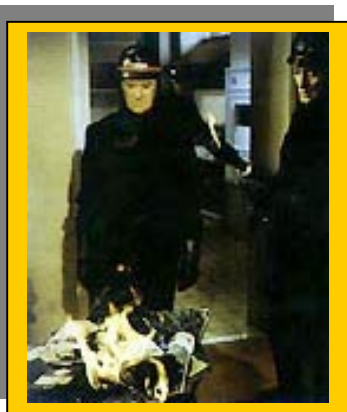
TWENTIETH CENTURY SCIENCE FICTION

Verne and Wells' works have provided content for 20th century filmmakers; a number of their novels have been made into feature length films. Likewise, scriptwriters found that the radio presented a valid medium for the works of science fiction's founding fathers. In the 1930s, the Mercury Theatre presented radio dramas that were chosen because their suitability to the radio medium. Sound effects, music, and dramatic performances combined with stories that were out of the ordinary made *The Mercury Theatre* one of the most compelling programs on the air. It was an H. G. Wells novel that provided substance for perhaps the greatest public event stunt in U. S. history. On October 30, 1938 Orson Welles' Mercury Theatre radio broadcast, based on H. G. Wells' *The War of the Worlds*, caused a panic that spread across the United States. The panic was a result of the seemingly real-life, real-time script that Orson Welles so cleverly crafted.

According to essayist Ken Sanes:

In adapting the book for a radio play, Welles made an important change: under his direction the play was written and performed so it would sound like a news broadcast about an invasion from Mars, a technique that, presumably, was intended to heighten the dramatic effect. As the audience listened to this simulation of a news broadcast, created with voice acting and sound effects, a portion of the audience concluded that it was hearing an actual news account of an invasion from Mars. People packed the roads, hid in cellars, loaded guns, even wrapped their heads in wet towels as protection from Martian poison gas, in an attempt to defend themselves against aliens, oblivious to the fact that they were acting out the role of the panic-stricken public that actually belonged in a radio play.

Destitute Gulch, www.sci-fi.ch and
Universal Pictures



Guy Montag is a fireman in *Fahrenheit 451*, whose job is to start fires.

If we credit the 19th century for beginning science fiction, we can argue that it came of age in the 20th century. Perhaps the most prolific and best known science fiction writer of the 20th century is Ray Bradbury (1920–). Like his early predecessors, Bradbury often blends his fiction with science and social criticism. The destructive tendency in humans to use technology at the expense of morality is often the subject of his work. Novelist Bradbury is best known for *Fahrenheit 451*, in which the government bans all books and streams information to the public via television; and his novel about the colonization of Mars—*The Martian Chronicles*. Bradbury is also known for his extensive collection of over 600 short stories. Credited with introducing the concept of the modern-day Walkman®, Bradbury inspired a Sony engineer after reading *Fahrenheit 451*. That novel also predicted wall-sized TVs, earpiece communicators, and advertising that would be present all around us.

Two of Bradbury's short stories, *The Golden Apples of the Sun* and *The Wilderness* are good studies in how science fiction might relate to space

science today. In *The Golden Apples of the Sun*, a rocket is on a mission to scoop up a piece of the sun and return it to their home for study—strong parallels to the Genesis mission with dramatic license. *The Wilderness* provides a good opportunity to study the implications that distance in space has in the field of communication. Both stories were written in the 1950s. Bradbury clearly tried to foretell what life would be like in the 21st century.



Additional prominent 20th century science fiction writers are Isaac Asimov and Kurt Vonnegut. Although every writer of science fiction varies in his or her definition of what science fiction IS, most are in agreement that the business of science fiction is to contribute predictive fiction: stories that tell what life may look like in the future.